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GIRLS OF YUCATAN.

They Spend Their Time in Singing, and Give No Thought to the Future.

Harper's Bazar.

In a big rocking chair the visitor appeared shrunken and ghastly. She had called to place herself at our service; we were neighbors; if there was anything that she or her daughters could do for us they would be most happy; we must consider their house, their belongings and themselves entirely our own possessions. She was a widow; her only son passed our house twice a day on his way to and from business—he was an optician—and we must consider him entirely at our service; he would do for us anything we required.

We expressed our profound gratitude, and hoped that the lady would likewise consider us altogether at her service.

About 9 o'clock next morning the senora made us a second visit. "Could we lend her the trifling sum of six reals [75 cents]?" It was most painful to have to ask a favor of such recent acquaintances, but her son had been disappointed in a little matter of business.

With the loan and her dignity the lady returned to her hungry family. At twilight the borrowed guitar sounded as frisky as ever and Dona Concha was at our window again, only now she was on the inside.

"Can those girls do anything besides singing?" we asked.

"Oh, yes; they make their own garments. You ought to see them when carnival comes round. The silly things will starve to save the little medios" (6½ cents) "to dress for those balls. Cheap muslin and ribbon is all they can get, but they make themselves pretty. Poor things! Carnival is the only pleasure they have in their whole life."

An idea struck us. "Would either of those girls come here and do some dress-making?"

Dona Concha at once went to inquire. She soon returned.

"Yes, Chanita can come if you show her how to do things; she cannot cut out or prepare work, but is willing to help you for a few hours, and asks only six reals a day."

She came and she worked, more or less, generally asking payment in advance to buy corn for those at home. She ate with us strong, hearty meals that wrought rapid improvement in her appearance. About the tenth day her mother came to say that Chanita would not go on working; it taxed her strength too severely to sew for a certain number of hours each day.

What became of those girls? Well, the last time we saw them they were seated just outside the door of their house, playing the borrowed guitar and trilling love songs, while the moonbeams lingered among their glossy tresses decked with tuberoses that perfumed the air. If they gave one thought to the future, no one could perceive it. Most likely they had eaten little that day, and had not a cent in their possession, such being the usual state of the family pocket; and yet their apparent joyousness benefited all who came within its atmosphere.

With their voices still falling on our ear, we asked ourselves, which is most to be avoided—this indolent, cheerful indifference to penury, or the unceasing, irritating struggle for more. In the first case there is a lamentable lack of ambition and effort; in the second there is an absence of meditation and repose. Activity is laudable but exhausting, and there is no more rapid way of recuperating than by permitting one's self a complete relaxation; not only cessation, but forgetfulness from toil. It is possible to be too industrious, and those who have such a tendency might lengthen their lives and be more in harmony with themselves and those around them by cultivating just a little indolence.

Rank Stupidity.

New York Press.

Mrs. Keene—My servant girl was telling me this morning that your servant girl is the stupidest she ever met in her life.

Mrs. Easy—How does she make that out?

Mrs. K.—She finds that your girl has been with you three months and doesn't yet know any of your family secrets.

A POPULAR EDUCATOR

Lessons to Be Learned by Study of the Exhibits at the Fair.

In the Machines There Shown the Progress of the Human Race Can Be Easily and Clearly Traced.

A great deal will be lost to our people through a failure on the part of the news as well as the trade papers to make an educational study of the exhibits at the world's fair. Records coming from such a study would be of lasting benefit to the community. I do not mean a study of the educational exhibits particularly, but rather a comparative study and record of the general exhibits. There would be more positive benefit, more that is instructive from reading such matter than the mere passing and looking at the exhibits as we would at a mere show. There is not so much in what we see as in what we think in connection therewith.

There is a definite relation between what one sees in connection with the development of the locomotive, as shown in the Transportation Building, and the exhibition of steam machinery in Machinery Hall. In the Transportation Building is the first part of the story of the locomotive. In Machinery Hall it is continued, but no man can say that it is ended. Its end comes with the close of human progress. The locomotive exhibit in the Transportation Building illustrates the general movement in nearly all works of invention. We find it in its various experimental stages before it reaches a commercial success. Then comes that practical genius, John Stevenson, who gathers together the better features of what has been done before and makes a commercial success of the problem of the locomotive. This incident has been repeated again and again. Nearly all inventions in mechanics had existed in fragments long before they take definite successful form. We hear that the electric lamp was in use in Paris twenty years before it was given practical form by Brush or Edison. We also hear that it cost $10 an hour to run each one of these lamps. We find the locomotive all but successful before it came from Stevenson's hand. It is interesting to note the progressive development of this machine as shown in the Transportation Building. Even the locomotive of twenty years ago appears insignificant as compared with that of to-day. Yet as we go from this splendid practical demonstration to the steam exhibit in Machinery Hall we can understand that these great machines will soon exist in memory only.

In conversation with a gentleman who was making a careful study of these exhibits for a practical purpose he said: "The fact that the end of the locomotive as a machine is at hand is so graphically shown on these grounds that I do not see how he who runs can fail to read. The necessity for the locomotive has all but passed."

"Explain why this is true."

"The locomotive is a beautiful, immense, well-made piece of machinery. On the other hand, it is frightfully wasteful in the consumption of coal and the use of steam. The general principle of the locomotive has never been changed. It is a tubular boiler, connected with slide-valve engines. The locomotive has never contained the highest development of the boiler or by any means the highest development of the engine. While both have been well built from a mechanical standpoint, they have never involved the use of the highest development of either boiler or engine. The workmanship has been perfect, but the idea carried out through the workman has never been high. We have a common type of tubular boiler and a very common type of slide-valve engine attached to it. It has never been found practical or feasible to unite the best ideas representing an economical consumption of coal by a boiler and the economical use of steam through an engine. This is as far as a locomotive has gone. Look into Machinery Hall. There are boilers of the highest type known—those which are very economical in the use of fuel. They consume only a small relative portion of fuel as compared with that necessary under the locomotive boiler. And then the engines: There are those which will produce many times the amount of power from the same steam as is required by the locomotive engine. The next step is a simple one. We see nearly all of these great engines producing electricity. The modern locomotive is the motor. The steam plant, instead of traveling with the the train, is stationary. Instead of being a common type of both boiler and engine, it is of the most advanced type known, producing power and transmitting it at an infinitely less cost than is now possible with the best locomotive."

AS TO BOILERS.

To those of us who are used to natural gas the sight of the boiler house of Machinery Hall is not as impressive as might be. We find the imposing batteries of boilers in this immense room connected with the oil fields of Indiana. There is a pipe line from the eastern part of the State to Whiting, in the western, and from there to Chicago. The firemen, instead of being begrimed with coal, are dressed in white duck suits and are altogether clean and tidy. As far as the necessity for their labor is concerned they might quite as well appear in a dress suit of the conventional type. This is in violent contrast with the boiler house of the exposition of 1876.

A general comparison of the boilers themselves with those in common use is advantageous even to the general reader who is interested in the cost of food and clothing and all that goes to influence such costs. The ordinary type of boiler will evaporate four or five pounds of water per pound of coal when expressed in the terms of coal. The best type of boiler now in general use will evaporate nine or ten pounds of water per pound of coal. On one hand we have five pounds of water evaporated and on the other hand nine, with the same coal. These terms may appear technical and not easy to understand, but when we say that it represents practically the same as the economical relation of 5 to 9 cents the illustration should be plain. This is for the production of steam which is to be used as power. The engine develops the power. A good, ordinary type of engine requires the evaporation of from forty-five to fifty pounds of water per hour per horsepower. The advanced type of engine—of triple and quadruple expansion type—does not require the evaporation of more than a third of that amount of water for the same horsepower. To express it crudely and not altogether correctly, there is, first, the relation of 5 cents to 9 cents for the production of steam, and then the relation of less than 15 cents to 45 cents in the positive production of power. Altogether this shows very clearly a part of the movement in the reduction in the cost of the comforts and luxuries of living.

The gentleman to whom I before referred said that the use of the boiler and steam engine of high type had been more general in ships than on land. He said that before 1875 steamships had not been formidable in carrying freight. A steamer of the old kind of 3,000 tons general capacity was compelled to carry 2,200 tons of coal, leaving only 800 for freight; while at the present time a steamer with compound engines can make the voyage and practically reverse the figures by carrying 2,200 tons of freight and 800 tons of coal.

Machinery of this high character and possessing these economical qualities is now coming into general use in ordinary manufacturing purposes. The smaller institutions cannot afford to purchase the high-priced boilers and the elaborate and expensive duplex, triple or quadruple expansion engines, but they can take their power from electricity produced by these expensive plants, and, though they may not be able to fully realize all of the economy of these high-grade machines, they will do much better than by owning and operating the cheaper power plants.

THE AUTOMATIC MACHINES.

Few of us realize the real significance of the wonderful automatic machines which one sees in the buildings at Chicago. There are the nail-making machines, which bite off from a roll of wire short pieces of metal and rapidly manufacture them into nails; there is the bolt machinery, which feeds the metal automatically, handles it and produces a finished bolt, and the hundred other machines which operate accurately and economically. In 1776 Adam Smith spoke of the division of labor in the manufacture of pins, and stated that ten persons among them could make upwards of 48,000 pins in a day. He spoke of this as the result of mechanical assistance and the division of labor. Now, three men will make 7,500,000 pins, of vastly superior character, in the same time. While this has happened, the rate of wages has increased absolutely and relatively, the number of hours of labor have been shortened, and the condition of all has been generally improved. With improved machinery the rate of wages is not so important in affecting the cost of production. Competition in prices does not so readily affect the price of labor where labor is so vastly productive through the help of improved mechanical assistance. I have seen people weaving by hand for 10 and 15 cents a day and working twelve and fourteen hours. This was in western France, in Brittany, where one can step back two or three hundred years in the world's history by a few hours of travel on a railroad and in a stage. These people worked in hovels, with poorly-lighted rooms and dirt floors. Their weaving, cooking, sleeping and eating were all within the same four walls. The young girl who runs a loom in Machinery Hall at Chicago is typical of hundreds and thousands of others who do the same class of work in the splendidly lighted and well-equipped factories which are provided with the manifold labor-saving devices of this time. Her home is no doubt attractive, and may be paid for through a building association, or by other satisfactory means. On one hand we have the loom operated by hand, at starvation wages; on the other, the condition which we may see and know to-day. This is measurably owing to improved mechanical methods.

I notice in the construction of some of the foreign machines that more pains were taken to protect the life and limb of the operator than with us. I saw two machines, middlings purifiers, one made in Dresden, the other in Milwaukee. There could be no doubt about the superior effectiveness of the Milwaukee machine, but the gearing of the Dresden machine and the other working parts were protected by wire screens and otherwise, so that the miller or his assistant was in no danger of being injured by coming in contact with the moving parts. We see very little of this kind of care in our own country. In none of the foreign countries would many of our machines or mills be allowed to run on account of the paucity of means for the protection of the workman. We do not understand the full significance of such accidents as are daily happening, or we would be more careful in the arrangement and protection of machinery than is now the case. Certainly we would be more exacting in the formation of laws regulating matters of this kind. It is a great tragedy to a family when the breadwinner is brought home minus a hand or a foot. The train of suffering and general consequences which follow such an accident can hardly be followed out. Possibly his wages were two or three dollars a day before his injury. He loses his hand and his earning capacity for all time. At first he receives a good deal of sympathy, and his neighbors have kind words for him. During his convalescence his friends send in jellies, cakes and other knicknacks. But in a few days forgetfulness takes the place of kindly expression, and the cold grind under the adverse conditions takes on its eternal movement. The wire screens over the gearing and the moving parts of the machine from Dresden would prevent most accidents of this kind. The watchfulness of a government which looks carefully into all these things would render tragedies of this kind almost unknown.

LOUIS H. GIBSON.

BENEFICIAL EFFECTS OF FRUIT DIET.

It Often Settles the Nerves and Puts the System in Good Condition.

New York Ledger.

"If people would only realize the advantages of confining themselves largely to a fruit diet in warm weather they would save themselves endless suffering," said a venerable physician in the course of a chat on hygiene. "I cannot understand how meat got such a hold on the human family as an article of food. It is against all the laws of physiology and the construction of the human being; nevertheless, a goodly portion of the race imagine that they cannot live without it, and almost all of them indulge in it to a great extent. I can remember very well of spending some time in a country district during a summer when there was an unusual amount of sickness throughout that locality. In some way or other the idea took root there that vegetables and fruit were injurious and caused the summer complaints that almost sweep whole families out of existence. In pursuance of this idea those people actually gorged themselves on meat. The consequence was that as the season advanced the disease grew more and more virulent, until it reduced the community almost to a state of panic. Almost all fruits and vegetables were allowed actually to go to the ground again, the people seemingly being afraid to touch them. Finally a consultation of physicians was held, and it was agreed that the only way to check the trouble was to get the people to give up their meat diet. Many of them gradually did this, and soon recovered; others obstinately held out, and scores of them died.

"While it is quite possible that, after all these years of habit, the human family may do very well on a mixed diet of meat and fruit, it has been definitely settled by some of the most excellent authorities that altogether too much meat is used. If people would use meat once a day instead of morning, noon and night, as is in many cases the custom, a decided improvement in the health of families and communities would be perceptible, and not only in the health but in the temper and particularly the nervous condition of the individual. It is a perfectly understood fact that animals fed with meat become more fierce and unmanageable than when they are kept on vegetable diet. It would seem that people might learn something from such experiments, and would adopt some of the improved methods of diet, especially in the training of children. Little ones fed upon meat get feverish, irritable and sometimes almost unmanageable. A change to a fruit and vegetable diet often entirely settles their nerves and puts them in excellent condition. Of course the change must not be too sudden. With this, as with everything else in life, a reasonable amount of judgment must be exercised. Parents whose nights are made wretched and their days a weariness by the worrisomeness and fretting of children would do well to try the experiment and see if much of the trouble of which they complain is not caused by errors in diet."

The Peach Crop.

Buffalo Courier.

The figures actually make one giddy in talking about the peach crop, this year particularly. It is reported, for instance, that the distribution of the peach crop this year has included the territory from Richmond, Va., to Toronto, Canada, on the north, and Chicago on the west. Within this district nine cities have taken over a million and a half baskets. Of these cities New York leads with about 600,000 baskets; Philadelphia took about 480,000; Boston, 210,000; Wilmington, Del., 120,000; Pittsburg, 48,000; Cleveland, 26,000; Chester, Pa., 36,000; Buffalo, 30,000, and Providence, R. I., 30,000 baskets, making a total of 1,600,000 baskets. The total shipments by rail to points lying within the territory named, to Sept. 5, were 5,773 carloads of 600 baskets each, a total of 3,463,800 baskets. It is estimated that 1,000,000 baskets have been shipped by water and hauled out of the orchards in traders' wagons. At least another 1,000,000 baskets have been used in the canning establishments, the evaporators, and by the canning of peaches done by private families; nearly 1,000,000 baskets of the fruit have been destroyed by storms that shook it from trees and made it unmarketable, and by railroad accidents that destroyed thousands of baskets of peaches and allowed other thousands of baskets to spoil because of the stoppage of transportation. So it is that the most conservative estimate makes the total of the peach crop of 1893 more than 6,000,000 baskets. It was just like the peach to act in that sensible way during the financial stringency.

MONUMENT CHANGES

Commission May Combine the Astragals of the Army and Navy.

Cause of Superintendent McIntosh's Visit East—MacMonnies May Make the Side Groups—Financial Status.

Thomas McIntosh, superintendent of the monument, is now in Philadelphia, whither he was sent to inspect the finished section of the navy astragal, which is casting there in the large foundry of Bureau Brothers. The firm wants an advance of money on the work done, and the commission deemed it wise to know through its own agent how far the astragal had progressed toward completion. His report, if rumors be correct, will be attended with more than usual importance. These rumors are to the effect that the commission contemplates a revision of the plans for the several astragals, and that it intends to countermand the order for the naval astragal, and combine the navy memorial with that of the army in one astragal. This would involve, of course, a cash settlement with the founders of the naval astragal, which is about half finished, and would mean an absolute loss for the money expended. It would entail further loss in the money paid Nicholas Geiger for the successful model of the army astragal, and also what was paid to others in that competition. It would again entail a new competition involving another year's delay or more, and a problematical cost, perhaps more than the present estimate of $21,000 for the army astragal as modeled by Geiger, unless "mere art" is not to be considered. If the rumors be true it is easy to explain the long delay in awarding the contract for the army astragal. The award upon the army astragal was made last year, and nothing has since been done to advance its completion. When questioned apout the rumors, President Langsdale refused to either affirm or deny, saying that he would reserve his views for the members of the commission. His silence was significant that some changes in the design have been sprung upon the commission. The proceedings of the next meeting will be watched with much interest.

The monument as designed consists of two parts, stone and bronze, neither of which is complete within itself. The reading, or story, of the monument requires both, the column of massive stone to symbolize strength and dignity and the bronze to give detail. The story, as designed, begins with the groups of war and peace, leading up to victory as typified by the crowning figure Indiana, through the army, naval and upper astragals. It would be incomplete without all of these astragals, as each forms one page, as it were, in the monumental story of Indiana valor. The Geiger astragal harmonizes remarkably well with the spirit of the design. It is bold in outline, depicting the carnage of nineteenth-century war, and is thoroughly American in treatment. The monument is so shaped that this astragal, as well as that of the navy, is essential to its symmetry, beauty and significance, whether they are considered apart from the shaft or in relation to each other.

At the next meeting of the commission an effort will be made, Commissioner Johnson says, to order the award of the contract for the side groups. The commission now has three offers before it, two of which are those of Hundrieser, of Paris, and Gaudez, of Berlin, constituting practically one. The former offers to execute the group of war for $39,500, and the latter the group of peace for $37,500, upon the models in possession of the commission. These offers would make the groups cost $77,000 in Europe, with the freight and erection to be paid for out of the funds of the commission. Estimates have been furnished the commission, showing that these items will cost from $10,000 to $15,000, which must be added to the cost of the work if done by foreign artists, making in all about $90,000. The bronze figures, as modeled by them, are to be from fourteen to sixteen feet high. They will not promise to complete the work in less than from three to four years, and being at such a distance, could not be hurried.

The other offer before the commission is that of Frederick MacMonnies, the artist and sculptor who designed the great fountain in the Court of Honor at the world's fair. He proposes to model, cast and erect the group for $100,000, and asks from three and a half to four years' time. He has the reputation of keeping his contracts as to the time to the letter. His offer includes a stipulation that the group shall be from sixteen to eighteen feet high, and shall contain not less than ten figures. The greater size of the figures will better harmonize with the massiveness of the monument. The commissioners are inclined to look favorably upon Mr. MacMonnies's offer, but have delayed on account of the greater price. Some of the commissioners say that the difference in size of the groups, requiring so much more material of an expensive nature, more than offsets the difference between the two propositions, and in fact really makes the American offer the cheaper. The commission has means sufficient to pay $100,000 for the groups and leave enough to finish the monument, as a part of this cost will come out of the general fund. There is available for the monument proper $144,000. With $100,000 spent for the side groups, $21,000 for the army astragal, $4,500 for the elevator, and $10,000 for the three subsidiary statues, minus such part as may be paid for out of the general fund, the commission will have from $10,000 to $15,000 left with which to put in the fountains and other finishing touches. The question, therefore, of the selection of the artist for the side groups is not involved with insufficient funds.

MacMonnies is a thorough American. He was born in Brooklyn, and first studied under St. Gandens, to whom he was apprenticed after the manner of art students in the days of the Renaissance. He acquired, by the drudgery of the studio, and by intense application, a thorough knowledge of the mechanics of the art, becoming before he was twenty years old an expert draughtsman. At this time his mind and hand were thoroughly trained, and he possessed elements of success only gained by the hardest of application. He spent his evenings in the studios of the Academy of Design, the Cooper Union and the Art Students' League. When he went abroad on money earned from his art his skill as a draughtsman commended him to the friendship of the professors in the art schools of Paris and Munich. His attainments surprised his fellow-students, to whom he was held up as an example of the value of draughtsmanship; and had he been a Frenchman he could have taken the Prix de Rome, which is not open to competition by foreigners. As it was he won the highest prize open to foreigners in the Ecole de Beaux Arts. He took the first prize for two years, and after he opened a studio for independent work he steadily added to his laurels. He took a gold medal in the Paris Salon, the highest award ever made to a foreigner. He wears the cross of the Order of St. Michel. Among his important works, besides the world's fair fountain, are the West Point battle monument, "Diana Hunting;" three life-sized angels, bronze, in St. Paul's Church, New York; colossal bronze statue of Nathan Hale, City Hall, New York; heroic bronze of James S. T. Stranahan, in Prospect Park, Brooklyn; fountain groups in bronze for a number of country homes of rich men, statue of the "Dancing Nymph," and a statue of Gov. Sir Henry Vane, for the Boston Library. He has in progress a colossal bronze fountain for Niagara City. If selected for the groups on the soldiers' and sailors' monument, he would, he says, give them a thorough American treatment.

Still Booming.

New York Weekly.

Eastern Man—How are things in Dugout City now?

Western Man—Booming, just a booming. Why, I happened to want a little spending money last week and it didn't take me half an hour to get a third mortgage on my house.